

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-25(Canceled)

26. (Previously Presented) A process for treating a portion of a surface of a metal substrate, by carburization, nitrocarburization and nitriding, comprising applying to a different portion of the surface of the metal substrate, a composition which is in liquid, semi-liquid or paste form and comprises

a source of boron which forms boron glass, during said treating;

a magnesium-silicon compound selected from the group consisting of magnesium orthosilicate (Mg_2SiO_4), magnesium metasilicate (MgSiO_3), and magnesium trisilicate ($\text{Mg}_2\text{Si}_3\text{O}_8$), wherein the source of boron glass and the magnesium-silicate compound are present in a weight ratio of 2:1 to 100:1, and wherein the magnesium silicon compound reduces the vapor pressure of boron and wherein the boron glass is soluble in water.

27. (Previously Presented) The process of Claim 26, which further comprises allowing the composition to dry on the said different portion of said surface.

28. (Previously Presented) The process of Claim 26, wherein the source of boron forms a boron glass on said different portion of said surface.

29. (Previously Presented) The process of Claim 26, which comprises washing the boron glass from said surface, after treating by said carburization, nitrocarburization or nitriding treatment.

30. (Previously Presented) The process of Claim 26, wherein conditions, of carburization, nitrocarburization and nitriding, further comprise a temperature ranging from 900-980°C.

31. (Previously Presented) The process of Claim 26, wherein any one of said carburization, nitrocarburization or nitriding, is undertaken under reduced pressure.

32. (Previously Presented) The process of Claim 26, wherein the composition further comprises 35-70 weight percent of an organic binder.

33. (Previously Presented) The process of Claim 32, wherein the magnesium silicon compound is magnesium trisilicate.

34. (Previously Presented) In a process for carburizing a surface of a metal substrate, in a reduced pressure carburization plant, the improvement comprising decreasing the damage to the oven surfaces comprising SiO₂, the improvement comprising applying to a different portion of the substrate, a composition which comprises

a source of boron which forms boron glass, during said treating;

a magnesium-silicon compound selected from the group consisting of magnesium orthosilicate (Mg₂SiO₄), magnesium metasilicate (MgSiO₃), and magnesium trisilicate (Mg₂Si₃O₈), wherein the source of boron glass and the magnesium-silicate compound are present in a weight ratio of 2:1 to 100:1, and wherein the magnesium silicon compound reduces the vapor pressure of boron and wherein the boron glass is soluble in water.

35. (Previously Presented) A composition, for protecting a portion of a metal surface during surface treatment of another portion of the metal surface, wherein the surface

treatment is selected from the group consisting of carburization, nitrocarburization and nitriding, wherein said treatment is conducted at high temperature, at reduced pressure or both, the improvement wherein the composition is in a paste, semi-liquid or liquid form and comprises

an organic binder,

a source of boron which forms boron glass and a magnesium-silicon compound selected from the group consisting of magnesium orthosilicate (Mg_2SiO_4), magnesium metasilicate (MgSiO_3), and magnesium trisilicate ($\text{Mg}_2\text{Si}_3\text{O}_8$), wherein the source of boron and the magnesium silicon compound are present in a weight ratio of 2:1 to 100:1, wherein the magnesium silicon compound reduces the vapor pressure of boron and wherein the boron glass is soluble in water.

36. (Previously Presented) The composition of Claim 35, wherein the magnesium silicon compound is magnesium trisilicate.

37. (Currently amended) The ~~process~~ composition of Claim 35 wherein the composition further comprises 35-70 weight percent of an organic binder.

38. (Currently amended) The ~~process~~— composition of Claim 36, wherein the composition further comprises 35-70 weight percent of an organic binder.

39. (Previously Presented) The composition according to claim 35 wherein the substance which forms boron glass and the magnesium-silicon compound are present in a weight ratio of 5:1 to 15:1.

40. (Previously Presented) The hardening protection composition according to claim 35 comprising, based on the total amount, 45 wt.% boron oxide, 5 wt.% magnesium trisilicate and 50 wt.% of an organic binder.